



a mighty oak has taken root in the energy field

ANNUAL REPORT 2007

Received SEC
OCT 10 2008
Washington, DC 20549

PROCESSED
OCT 15 2008
THOMSON REUTERS

Acorn Energy Inc. is an energy technology holding company that accelerates the growth of emerging ventures that promise meaningful improvements in the efficiency of the energy sector. We create shareholder value by deploying patient capital in overlooked pain points of the energy industry.

letter to our SHAREHOLDERS

We have chosen the acorn as the symbol of our company. Like the oak tree's DNA, we have a set of core business principles and strategies that govern us. Like fertile soil, trends in the energy industry nurture our growth.

The first strand of Acorn's DNA is a focus on people. At Acorn we use technology to solve problems, but we never forget that people are at the heart of everything we do. I believe that we are entering the age of the energy entrepreneur. Our management team has been involved in transforming other industries with information technology. Now they are seeking to apply the lessons learned to the energy industry. Acorn management teams combine veteran energy industry knowledge with young aggressive entrepreneurial talent. They are motivated with substantial equity upside. In a rapidly graying industry known for its conservative style, Acorn's companies stand out like young athletes.

The second strand of our DNA is a contrarian strategy. To make outsized returns we have a highly divergent point of view. Rather than following the herd that is solving the alternative fuel problem, our contrarian strategy is focused on making the current infrastructure cleaner, smarter and more efficient. Our companies are generating revenues today by upgrading and adding intelligence to our failing electric power infrastructure while at the same time preparing the grid for the next generation of energy sources.

Three industry trends create fertile opportunities for our companies: skyrocketing demand for energy; supply constraints and environmental concerns. Combined, these trends create a perfect storm: The 21st century energy crisis. At Acorn we believe that this energy crisis will serve as a catalyst for the most rapid adoption of energy technology in human history.

Demand for electricity in North America shows no sign of slowing while the developing economies around the world are adding an extraordinary load. Acorn companies like GridSense and Converge provide solutions to manage that demand and make the electric infrastructure more efficient. Acorn's Local Power has a unique market structure with a cutting edge solution for achieving energy portfolio change in America's cities.

Despite the continuing skyrocketing demand, there continues to be serious constraints on supply. We are reaching an end of the world's "easy to find" fossil fuels. We require increasingly large and complex energy infrastructure to drill deeper to reach new sources of oil. Coreworx is a leading provider of the software tools to help engineering firms and owners of energy assets like Chevron reduce the cost and time to bring "oil on deck".

Ever-increasing concerns about the environment are forcing states to tighten the regulation of emissions from coal burning power plants. However, coal remains the primary source of electric power in North America and will remain so for the foreseeable future. Acorn's CoaLogix provides some of the industry's most cost-effective pollution reduction solutions, allowing coal-fired plants to continue to power our economy.

In 2007 we completed the first full cycle of Acorn's energy technology investment strategy with Converge's IPO in April and our sale of a significant portion of our position in December. Using the proceeds from the sale of these shares we have redeployed our capital into new opportunities with our creation of CoaLogix and acquisition of SCR-Tech, our acquisition of 25% GridSense and our acquisition of Coreworx.

In the following "Highlights from Our Operating Companies" you can read more about the different ways we are working to transform the architecture of energy.

While I am pleased to be able to report our 2007 successes to you, what really excites me are our prospects for next year. We're getting smarter. As we add new acquisitions, new customers, new partners, and new talent, the roots of our tree are digging deeper. We are building the industry's strongest and richest source of knowledge and the most energized management teams. That's something to bet the future on.



John A. Moore, CEO
September 2008

A handwritten signature in dark ink that reads "John A. Moore". The signature is fluid and cursive, with the first name being more prominent.

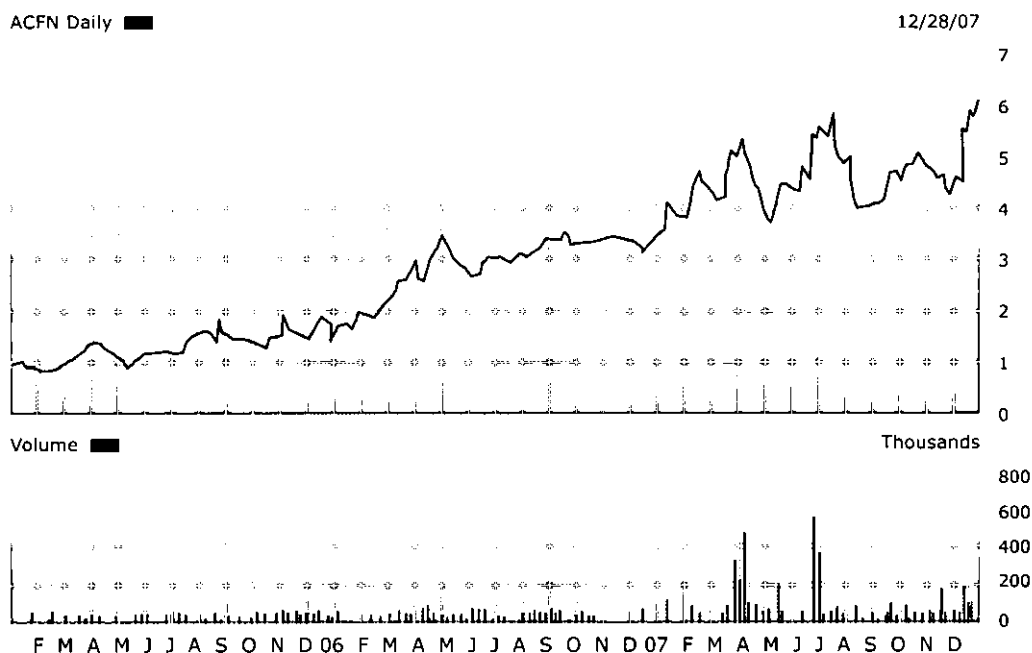
highlights from our

OPERATING COMPANIES

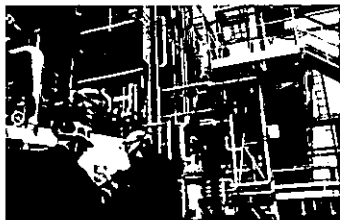
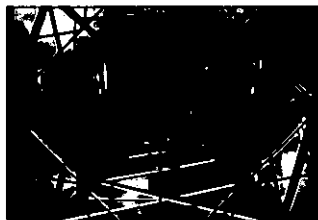
Many companies that started up in the 1990s have proven their technology or business model but do not have the resources for rapid future growth.

We acquire these companies affordably because large energy companies are typically late adopters of new technology. Long sales cycles often exhaust shareholders. Our investments provide acceleration capital to help these companies reach the tipping point toward profitability with modest risk.

Each of Acorn Energy's companies has been selected based on the quality of its leadership and vision. We know there are many places where you can invest your money. We believe our unique perspective, our investor's capital and our small group of entrepreneurs can make a difference in the world.



Source: Bigcharts.com



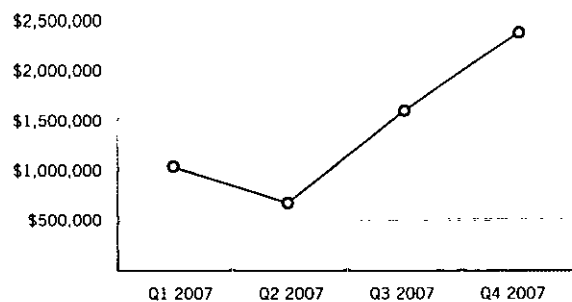


fig. 1: 2007 Quarter Sales

CoaLogix is Acorn's new platform for participating in the burgeoning clean coal market. We believe the opportunity to help utilities optimize their existing coal plants while reducing their environmental footprint is one of the most compelling opportunities in the energy industry today. CoaLogix CEO Bill McMahon and his team have built SCR Tech into the leading provider of catalyst regeneration technologies and management services for Selective Catalyst Reduction (SCR) systems used by coal-fired plants to reduce nitrogen oxide emissions. SCR-Tech is the cornerstone of CoaLogix.

Comverge is a leading provider of clean energy solutions that improve grid reliability and supply electric capacity on a more cost effective basis than conventional alternatives by reducing base load and peak load energy consumption. This revolutionary approach acts like a steering wheel for the electrical grid, shaping demand to fit supply and enabling power companies to improve their efficiency. Comverge's successful April 2007 IPO has resulted in a \$275 million current valuation for the company.

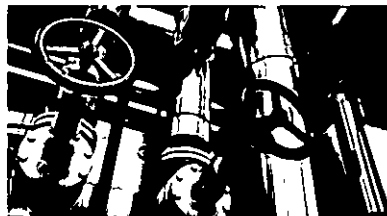
GridSense Systems Inc. is an industry leader in providing remote monitoring and control systems to electric utilities and industrial facilities worldwide. These systems are used in a myriad of utility applications including outage management, power quality monitoring, transformer management, capacity planning, trouble shooting, and demand response, provide network operators with the intelligence to better and more efficiently operate grid operations. CEO Lindon Shiao, age 34, speaks fluent Mandarin and has built a power generation business that was sold to ABB. Located in Sydney, Australia and Sacramento, California, GridSense has been in business for over three decades, with over 90 utility customers worldwide.

Today more than 50,000 engineers are using Coreworx software to improve the efficiency of the design, construction, and commissioning of large capital projects. Based in Kitchener, Ontario, and partnered with IBM to reach around the world, Coreworx is pioneering the digital plant to reduce cost and time over runs that often plague large complex energy projects.

DSIT's sonar technology allows owners of fossil fuel infrastructure like oil rigs, pipelines, and oil terminals to protect their investments at a small fraction of their replacement cost. DSIT established itself as the leader in the field of threat detection for underwater energy infrastructure by winning the first contract for such an installation, acknowledged in the August 2007 issue of Jane's Defense Weekly. Another highlight was the award of a \$7.5 million sonar project for the Israeli Ministry of Defense.

Local Power seeks to revolutionize the \$325 billion retail electricity market by enabling city governments to secede from their supply relationships with traditional utilities. By adopting renewable portfolio standards (RPS), progressive cities are stimulating their economic development and protecting the local economy from fuel price spikes. Local Power is currently retained by San Francisco to manage its implementation of CCA which represents over \$7 billion of electricity purchase over the next 20 years.

Paketeria is a "shop-in-bank" service model offers postal services, retail electricity contracts, internet-terminals, cell phone usage, copy and printing services, Ebay agency, photo developing, and cartridge refilling. In Germany Paketeria innovated the "shop-in-bank" model, a retail concept that promotes savings in logistics and transport, two of the largest consumers of fuel nationwide. Impulse Magazine, a leading German business publication, named Paketeria, its "second most promising new business franchise of 2007."

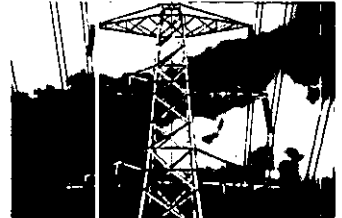
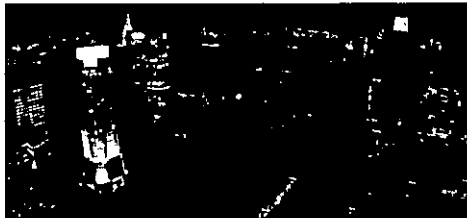
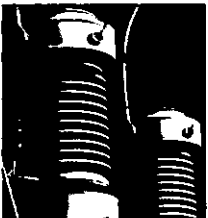


focus on Comverge:

TRANSMISSION & DISTRIBUTION

On April 13, 2007 Comverge successfully completed an initial public offering through Citigroup and raised over \$80 million to grow its business. In December 2007 Citigroup and Goldman Sachs led a secondary offering and we were able to realize over \$29 million from a partial sale of our shares.

Comverge is the proof of concept of Acorn's business model. We discovered an overlooked pain point in the energy industry. Rapidly growing demand for energy at peak periods was undermining the reliability of the electric grid. The conventional solution was to build gas fired peaker plants but these are expensive, often costing more than ten times that of base load supply and often pose enormous environmental concerns.



We made a contrarian bet during the dot com bust when we acquired the energy intelligence assets of Lucent and Scientific Atlanta for less than a third of their revenues. However we bought more than revenues. We bought proven technology and credibility as well as a customer list of more than 500 utilities. Utilities knew from over 25 years of reliable service that our solution was low-cost, rapidly deployable, unobtrusive and economically sound. We "bet the jockey" when we recruited Bob Chiste, a serial energy entrepreneur, to combine the acquisitions with our Powercom business and transform the business model from selling devices to selling capacity.

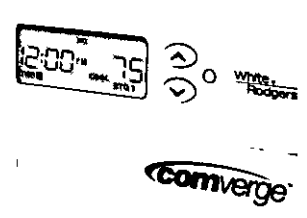
Comverge now manages more power than all the solar cells in the world combined.

We brought in seasoned energy co-investors like EnerTech Capital Partners to help us accelerate the growth of the business. Lastly, we were patient while the acorn took root and created the demand response market.

After the July 2007 acquisition of Enerwise Global Technologies, Comverge now manages more power than all the solar cells in the world combined. Acorn is now committed to redeploying the capital we have generated from Comverge to relieving other pain points in the energy industry.



fig. 2: Comverge on the Nasdaq



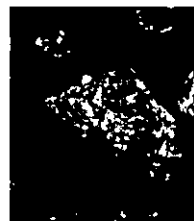
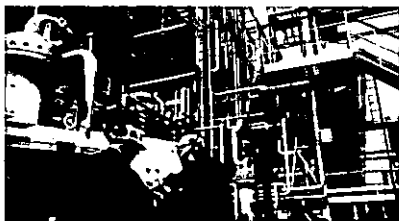
focus on CoaLogix:

POWER GENERATION & ENVIRONMENTAL

On November 7, 2007 Acorn Energy acquired SCR-Tech Inc. and formed CoaLogix to reduce the environmental footprint of the coal fired power plant industry.

The US electrical demand is growing at over 1.6% per year which equates to over 6,000MW of additional power needed every year. In order to meet this demand, coal provides 50% of the US electric generation and 40% worldwide. Solar provides approximately 1/10th of 1% and wind supplies approximately 2% of our electricity needs. New nuclear installations will only make an impact in 10 to 15 years. Natural gas is expensive and only getting more so. In addition, the US is not drilling for new natural gas or petroleum sources due to the political climate against drilling activities.

While non-coal sources are necessary for our energy supply in the future, coal is the most abundant fuel and efforts to reduce its environmental footprint are crucial. Utilizing coal as an energy source is critical to our way of life, independence and future.



Coal will remain the major source of our electricity for the next 25 years, so we must invest to reduce its environmental impact now. A 2% reduction in the footprint of coal units in the US is equal to 150% of all the solar and wind generation in the US.

SCR-Tech is the heart of CoaLogix and our business plan, CoalVision 360. The Selective Catalyst Reduction (SCR) system in a power plant converts nitrogen oxides, a greenhouse gas produced from the combustion of coal, with the aid of a catalyst into nitrogen and water. Over \$1 billion of catalyst has been installed in coal fired plants in the US. The average SCR system, installed in 2003, operates five months per year under state laws. Under these operating conditions the catalyst deactivates in five years. The owner of the coal plant has three options:

- add one additional layer of new catalyst and extend the life of the SCR
- buy new catalyst and landfill the poisoned catalyst, or
- regenerate the catalyst through SCR-Tech which obviates the need for landfill.

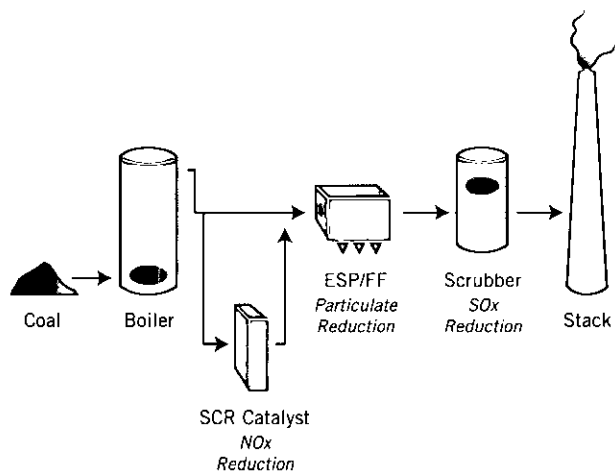


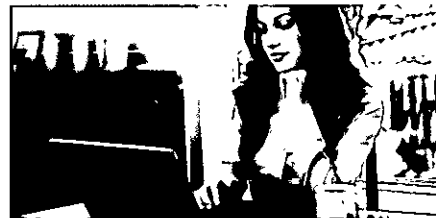
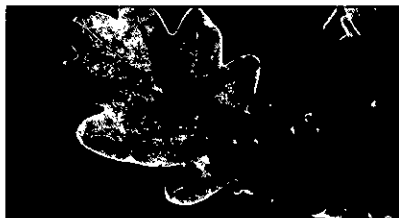
fig. 3: Clean Coal Processing

Coal will remain the major source of our electricity for the next 25 years, so we must invest to reduce its environmental impact now.

SCR-Tech created the US market for regeneration. We are poised for rapid growth as the fleet of catalyst approaches maturity. Each layer of poisoned catalyst is the size of a football field. SCR-Tech helps prevent the catalyst from ending up in a landfill.

The SCR is a very strategic component of the air pollution control system of a coal plant. It affects and is affected by every other component in the system. Our vision for a holistic approach to reducing the environmental footprint of power plant is rooted in our credibility and history of excellent service of SCR's. We have a strong technical reputation for problem solving and innovation at SCR-Tech.

Coal is an inevitable part of our energy infrastructure and making it cleaner must be a top priority for maintaining our lifestyle for ourselves and our children.



company DIRECTORY

HEADQUARTERS

Acorn Energy Inc.
4 West Rockland Road
P.O. Box 9
Montchanin, DE 19710
302-656-1707
www.acornenergy.com

DIRECTORS & OFFICERS

John A. Moore
Director, President and CEO
jmoore@acornenergy.com

George Morgenstern
Director, Founder and
Chairman of the Board

Richard Giacco
Director and Member
of Audit Committee

Joseph Musanti
Director and Chairman
of Audit Committee

Richard Rimer
Director

Scott B. Ungerer
Director

Samuel M. Zentman
Director and Member
of Audit Committee

Michael Barth
Chief Financial Officer

Sheldon Krause
Secretary and General Counsel

COMPANIES

CoaLogix Inc.
11701 Mt. Holly Road
Charlotte, NC 28214
www.coalogix.com

Comverge, Inc.
120 Eagle Rock Road, Suite 190
East Hanover, NJ 07936
www.comverge.com

GridSense Inc.
2568 Industrial Blvd., Suite 100
West Sacramento, CA 95691
www.gridsense.net

Coreworx
22 Frederick Street, Suite 800
Kitchener, Ontario, Canada
www.coreworxinc.com

Local Power Inc.
35 Grove St. #118
San Francisco, CA 94102
www.localpower.com

DSIT Solutions Ltd.
2 Rechavam Zeevi Street
Givat Shmuel, 54017 Israel
www.dsit.co.il

Paketeria AG
Buckower Damm 114
12349 Berlin, Germany
www.paketeria.de

INVESTOR RELATIONS

For additional information regarding
Acorn Energy Inc., please contact:
Christianna Miller
Director of Communication:
cmiller@acornenergy.com

LEGAL COUNSEL

Eilenberg Krause & Paul LLP
11 East 44th Street, 19th Floor
New York, New York 10017
www.eeklaw.com

REGISTRAR AND TRANSFER AGENT

American Stock Transfer & Trust Co.
59 Maiden Lane
New York, New York 10005
www.amstock.com

CoaLogix™

comverge

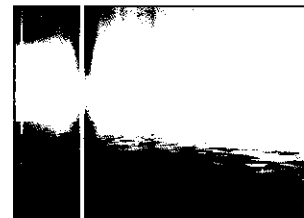
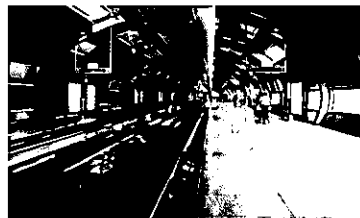
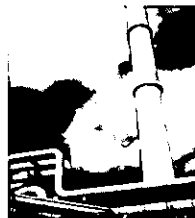
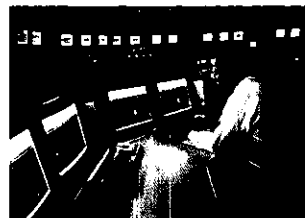
GridSense™

 **coreworx**

Local Power.



 **PAKETERIA**
Super Service Markt





4 West Rockland Rd
P.O. Box 9
Montchanin DE 19710

P 302.656.1707
F 302.656.1703
www.acornenergy.com

Transforming the Architecture of Energy

END

ACFN
NASDAQ
LISTED